CITY OF MIAMI BEACH

Office of the City Manager Letter to Commission No. 194- 2005



Date: July 26, 2005

To:

Mayor David Dermer and

Members of the City Commission

From:

Jorge M. Gonzalez

City Manager

Subject:

DISCUSSION REGARDING CASTLE BEACH HOTEL/CONDOMINIUM

The Castle Beach Hotel/Condominium, located at 5445 Collins Avenue, was issued several life safety code violations by the City's Building Department in early 2004. As a result, the Condominium Association for the building hired two consulting engineers to address the deficiencies beginning in March 2004. The situation progressed through 2004 and 2005 without the violations being fully addressed by the Condominium Association. Pursuant to a report issued by the Condominium Board's consulting engineer, the Building Official conducted a series of life safety inspections in April 2005 and the building was subsequently closed on April 14, 2005.

On July 6, 2005, shortly after the conclusion of the City Commission meeting, a number of Castle Beach residents came to City Hall to speak at the 5:30 PM Sutnick Hour. Since the Commission Meeting had already adjourned, Vice Mayor Matti Bower and representatives from the City Manager's and the City Attorney's Office met with these residents to discuss the issues at the Castle Beach. Assistant City Manager Tim Hemstreet's notes from that meeting are attached.

The residents raised a number of concerns/issues at this meeting and requested from the City assistance for resolving as many of these issues as possible. These items are identified below, accompanied by either City staff recommendations or other appropriate information.

1. A comprehensive list of all required repairs should be provided to the unit owners.

Response: The Building and Fire Departments have issued a number of specific violations sufficient to cause the closure of the facility for Life Safety reasons. The violations number in the hundreds, are based primarily on visual the City's available on will be inspections. and (www.miamibeachfl.gov/newcity/condominiums/main.asp). At this point in time, the property owner's consultant is responsible for identifying all work necessary to correct all violations and bring the building into compliance. Copies of the initial findings of the consultant that have been provided to the City will also be posted on the City's website (for those without internet access, all these documents can be viewed in the City Clerk's office). A report provided by the one of the consultants is attached.

Agenda Item	R9C
Date	7-27-05

2. Will the City set up a Special Assessment District to fund the repairs to the Castle Beach Hotel/Condominium?

Response: Not possible. The City is precluded by state law from creating a Special Assessment District to fund improvements on private property that primarily benefit the private property owner. There is a constitutional prohibition on a municipality lending its credit or giving financial aid to corporations, associations, partnerships or persons (Article VII, Section 10). A prior legal opinion was rendered by the City Attorney on May 30, 1997 to then-City Manager Jose Garcia-Pedrosa regarding requests for City financing of the installation of fire sprinklers in privately owned multi-family dwellings. This opinion also briefly addressed whether special assessment districts could be set up for this purpose, which was also rejected by the City's bond counsel, since the improvements to be made would be privately owned and not owned by the City. The underlying rationale was that, generally, special assessment districts are set up to finance infrastructure improvements which are on publicly owned land (for example, fire hydrants, street paving, provision of sewer and water lines).

3. Will the City either loan the needed funds to the Castle Beach Hotel/Condominium or will the City act as a "guarantor" for a private loan to fund the needed improvements?

Response: Not possible. The City is precluded by state law from either borrowing funds on behalf of, or acting as the guarantor for, a private entity. There is a constitutional prohibition on a municipality lending its credit or giving financial aid to corporations, associations, partnerships or persons (Article VII, Section 10). A prior legal opinion was rendered by the City Attorney on May 30, 1997 to then-City Manager Jose Garcia-Pedrosa regarding requests for City financing of the installation of fire sprinklers in privately owned multi-family dwellings.

4. Will the City offer a Property Tax Rebate to the unit owners of the Castle Beach Hotel/Condominium during the timeframe of the building closure? Alternatively, will the City "lobby" the County to rebate property taxes?

Response: Not possible. The City and the County are precluded by state law from rebating property taxes for this purpose.

In addition, the City has obligated to provide as much information as possible to the residents by July 28, 2005, which is the date that a meeting has been scheduled by the current Receiver for the property to meet with the unit owners. This meeting will take place at the Miami Beach Convention Center. The information that the City has in its possession has been posted on the City's website. Additionally, staff has continued to respond to individual unit owner questions as they have arisen.

Several requests from the residents for legal assistance/advice has also arisen. The City Attorney's Office has recommended that affected unit owners contact the Florida Bar Association for a referral service to local attorneys that specialize in condominium law. The contact information for the referral service is: 1-800-342-8011 or 1-800-342-8060 ext.

5844 or, the Florida Bar's on-line service at www.floridabar.org; click on Find a lawyer and then the listed related link of "lawyer referral service." All participating attorneys agree to a \$25 consultation for a half hour.

Earlier this week, the City was notified by Miami Management the Condominium Association, that approximately 300 unit owners were planning on attending the City Commission meeting on July 27 with the intent of addressing the City Commission. If there is additional information that you would like to have, or an expansion on the information provided herein, please feel free to let me know.



c: Murray H. Dubbin, City Attorney
Robert C. Middaugh, Assistant City Manager
Tim Hemstreet, Assistant City Manager
Ramiro Inguanzo, Chief of Staff
Rhonda Montoya Hasan, First Assistant City Attorney
Hamid Dolikhani, Acting Building Director

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Notes - Castle Meeting - 7/6/2005 General Comments

- · Unit 19 Owner, "Rocio" Builday closed 3 months ago Visited and spoke with Andy Villereal. AV advised for that vios go back 2 years. Re-capped history of vios @ Castle Beach.
 - · "Unit 1521" March 1, 2005 has "NO vids" according
 to letter received by 2 of the attorneys from
 shutts + Bowen.
 - · Fools City has been irresponsible its haddity of this.
- · Heard rumer that City provides general assistance to los placed residents.
- Unit owners have received form letters as sifere of vios from Builday Department. Would like a task force assigned of personnel who can work with them to identify as to what should or needs to be here. Has lay people who cannot decipler what the vios say.
- Alleges that Condo Board was not appropriate entity to notify.

 Believes that all unit owners should have been notified. Alleges

 that several Condo Barres Members were in jail.
- · RCM clarified legal authority, shut-down process, notice provisions, identified the legal entity that we address is the Court appointed Receiver.

- · Unit owner Claims that Judge Schumacher has said as of July 6, 2005 that the lity can speak with unit owners in addition to the Receiver. Holleges that Judge is requiring lity to provide answers to a "list" of questions.

 No "list" provided.
- · Unit owners want a less expensive way to make repairs.

 Leoking for a defined list of what needs to be done

 The order to regar occupancy.
- · VM Bower committed to vespondry to a list of vishtoms.

 that must be addressed.
- · Unit luners are also looking for formacial assis touce from the City. Recommended a Special Hospessment by the City. Create the Castle as a Special Assessment District.
- Other option is to have the lity guerantee their boan. In order to secure financing.
- Allegation that lify is at fault for not notifying each prospective purchaser for the last Zyears that vios were on building.
- · 1999 Alleged meeths with Phil Azam lity was considering closing Castle at that time. Nack was being done, i.e., some corrective action taken. Several vios relentitied and alloressed

· At that tome, Tewn homes were given COs under the pre-1996 lade. Alleges that several mid-to-late 19905 mg pectas done Morrectly. Code not entirced.

· Why were additional permits allowed to be pulled? Why vere permits applied, pulled, closed w/o mspections. Question about "commercial" units issued?

· Shufts of Bower represents 130 unit owners.

· "Advisory lammittee" set-up to represent the Unit Owners In builday.

· VM Bewer re-cap:

· List of required repairs

· Committed to have as much information as possible by 7/28 Town Hall Weetry.
Legal to provide response on Special Assessment.

· Will have neeting with Advisory lammittee prival to the 28t

· VM Bower committed do provide a response with

pre-landary time table by Friday afternoon (7/8).

Residents would like a Tax Reloute for period of Red Tag, or at least have lify lobby County for top relief during this time.

Minimum Life Safety Requirements For Reoccupation of

Castle Beach Hotel/Condominium 5445 Collins Avenue Miami Beach, Florida 33140

Prepared for

Mr. Robert Stone, Receiver and City of Miami Beach Building and Zoning Department by

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Draft

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July 18, 2005

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Purpose

The purpose of this document is to identify the minimum life safety features that must be accomplished prior to reoccupying the Castle Beach Club Condominium defined as **Phase I.** Such features will provide the minimum protection for occupants with respect to fire and basic building services/operation. A description of such features, together with the projected associated costs, are presented herein.

In addition, other necessary items of repair and maintenance in the near future are identified as **Phase II**. These items are outlined in **Appendices** A thru E.

Background:

In March 2004, Pistorino & Alam Consulting Engineers were hired to evaluate and assess the condition of the Condominium known as the Castle Beach Club Condominium, located at 5445 Collins Avenue, Miami Beach Florida 33140. This evaluation and assessment includes the Architectural, Structural, Civil, Mechanical, Electrical, Plumbing, Fire Sprinkler and Life Safety Systems as well as building code violations in the existing building.

In June 2004 the Building Evaluation Report was issued to the Courts, Receiver and The City of Miami Beach, Florida. Additional reports documenting Electrical and Plumbing deficiencies were issued in December 2004, January 2005 and March 2005.

In April 2005, The City of Miami Beach vacated the project, declaring it an unsafe structure based upon electrical findings and other conditions of concern.

Ongoing Activity:

Subsequent meetings have been held with City of Miami Beach Building Officials and the Fire Marshal, Design Professionals and the Receiver, among concerned parties, in order to evaluate and determine the minimum life safety requirements needed to be in-place in order to reoccupy the building. The previous and ongoing building systems reports provided the basis for the current life safety evaluation. Emergency electrical repairs have been made to provide temporary service to vital building functions. A coordination meeting was held on July 12, 2005 with City of Miami Beach Building Officials to review the items contained in this document and obtain a consensus for the necessary improvements required.

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Criteria Used for Life Safety Systems Assessment:

The building was originally built in 1969 as a hotel, was remodeled in 1992 and was partially converted to a condominium at that time. It has been operated as a hotel – condominium since that time.

The City of Miami Beach has indicated that the specific building code to be used in this assessment will be the Florida Building Code (FBC), 2004 for R-1, R-2, A-2 & M classification and the Florida Fire Prevention Code 2004 for all required modifications. In the case of mixed occupancies as noted above, the more stringent occupancy code requirements will prevail. (See Appendix F)

In addition to the above, the design will provide the proposed life safety systems complying with Existing Buildings, Section 304 Alteration- Level 2 of the 2004 FBC together with existing systems modifications. (See Appendix G)

- So that there is no misunderstanding, the Building Official will issue a limited Certificate of Occupancy after completion of the minimum life safety improvements for the Common Areas only as described in this document as Phase I. The City of Miami Beach requires that individual unit deficiencies must be addressed by the unit owners prior to the reoccupation of their individual units.
- Units that are less than 400 square feet will not be provided with electric power to service full kitchens and appliances unless a zoning variance is obtained.
- The lower commercial areas will not be reoccupied until a smoke control system is installed.

Costs

The requirements specified in this document supplement the initial June 2004 Building Evaluation Report and subsequent reports issued.

This is a qualified conditional Life Safety evaluation considering this building has a limited smoke control systems (SCS).

The estimated cost is to implement and put in place the **minimum** repairs and systems necessary to reoccupy the building's common areas with the understanding that other repairs outlined herein in **Phase II** should be made within a two (2) year period. (see Appendices A-E)

The total project cost for Phase I to reoccupy the Building's common areas is:

<u>\$9,898,300</u>

The total estimated repair costs for Phase I & II is:

\$27,146,000

Such costs are summarized on Page 24.

HVAC and FIRE PROTECTION SYSTEMS Phase I Schedule and Cost for Minimum Life Safety Requirements:

Note: There are additional repair and replace maintenance items that will still exist after the above is completed for the HVAC and Fire Sprinkler systems. They are listed in Appendix A- HVAC Maintenance Program

The rational for the items listed (1-15) is provided in pages to follow.

Description	Estimated Cost
1. Existing HVAC system for residential tower must be modified and equipped with fire/smoke dampers at each floor at the vertical shaft connections	\$100,000
2. Tower enclosed exit stairwells must be pressurized.	\$ 50,000
3. Provide smoke control by natural means (cross ventilation through the doors/windows) for lobby ar	\$100,000 ea.
4. Restore and bring up to code elevator shaft relief vents. Pressurize tower elevator shafts	\$150,000
Smoke Exhaust and Ventilation system must be provided for underground parking garage.	\$200,000
5a. Structural openings for shafts	\$200,000
6. Replace AHU and provide airtight fire rated mechanical room next to the chiller room	\$50,000
7. All the condenser and chilled water pumps (5) and horizontal piping (not risers), headers and valves to be replaced and relocated including house keeping pads and inertia bases.	\$100,000
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Description Continued	Cost
8. Existing chiller room to be provided with emergency Ventilation and refrigerant leak monitoring system.	\$30,000
 Provide required fire dampers, controls and duct work for missing outside air intakes for the air handling units throughout building. 	\$ 50,000
9. Fire pump shall be separated from electrical switchgear room with fire rated wall.	\$ 20,000
10. The fire pump shall be replaced with one that is 1000 GPM rated and could provide 100 PSI of residual water pressure at roof manifold.	\$50,000
10a. Replace exist 6"dia. fire service with new 8" dia. pipe to street with backflow preventer.	\$100,000
11. Provide required fire sprinkler/deluge systems over new cooling tower per NFPA 214 and new heads required by new work and modified areas.	\$20,000
12. Repair and replace corroded and painted fire sprinkler heads and piping; provide 2 ½" fire hose connections with NST adapter, throughout building.	\$30,000
13. Install new emergency generator fuel tank and relocate from basement to new location above current flood criteria	\$10,000
13a. Remove existing fuel tanks and possible environmental clean up	\$ 100,000
14. Replace all piping, valves and fittings in swimming pool equipment room	\$45,000
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Description Continued		
15. HVAC Controls wiring Direct Digital Control (DDC)	\$75,000	
New electrical control wiring and devices will be required for the new DDC systems to be added.		
 BMS (Building Management System) installation and interconnection with new fire alarm system. 	\$25,000	
New electrical control wiring and devices will be required for the new EMS systems to be added.		
17. Provide additional sprinkler heads in all units to Comply with a fully sprinklered building classification	\$180,000	
Hard Cost	\$1,685,000	
OHP @ 25%	421,250	
Permits/Fees	20,000	
Engineering Fees design and inspection 15% 318,900		
Total Costs (MECHANICAL)	\$ 2,445,150	

The requirements for a new building of this mixed occupancy type would require a complete public space smoke control system, exit stair pressurization, elevator lobby separation and elevator shaft pressurization. A complete smoke evacuation system for the public spaces in this building is unachievable due to space and structural limitations. The separation of the elevator lobby, elevator shaft pressurization, and stair pressurization is feasible along with providing a limited fire and smoke containment system by adding fire and smoke dampers at each tower floor main HVAC vertical duct layout. There will be limited smoke control systems for the main lobby, mezzanine level and commercial spaces. The garage being below grade will require an exhaust and ventilation system. The residential units will be made to comply with the requirements for a fully sprinklered building.

Existing Mechanical Building Systems Description:

Cooling Plant:

- Cooling plant consists of two centrifugal chillers 440-ton (ea.) connected in series and located at the mall level.
- Cooling tower is located on the roof and cools-down the condenser water for the cooling plant.
- Two circulation pumps are provided for the chilled water loop and two active condenser pumps and one standby pump for the condenser water loop. There is no standby pump for the chilled water system.
- The original central gas-fired boiler heating system that circulated hot water (instead of chilled water) through fan-coils during cold weather is destroyed and abandoned. No central heating is currently supplied by the main chiller plant.

Air Conditioning Systems:

• The 14-ton (6000 CFM) fan-coil unit located on the mezzanine level is serving the entire mezzanine level and all tower residential hallways on all floors through a vertical concrete shaft with no fire dampers provided at floor outlets. There is no return air from tower residential hallway levels. This system receives return air only from the mezzanine level.

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Existing Mechanical Building Systems Description Continued

- Two 20-ton (8000 CFM ea.) fan-coils are serving the lobby level. Both systems have return air (RA) and outside air (OA) intakes. The OA intake for one fan-coil is blocked off with plywood. There are two separate 10 ton fan-coil units providing air-conditioning and make-up air for the range hoods at the commercial kitchens on this level. Another 20-ton fan-coil is located at mezzanine level and serving the theater auditorium only. Restaurant dining area supplemental overload fan-coils are located above the ceiling without any OA intake.
- A 20-ton (8000 CFM) fan-coil is located next to chiller room and serves the commercial shops below the lobby level. This system is utilizing 100% outside air and has no return air path provided. There are four fan-coil units suspended from the ceiling which are providing air conditioning and make-up air (for clothes dryers) at the commercial laundry room.
- A horizontal chilled water fan-coil unit is located above the ceiling in each residential unit in the tower. There are several individual rooftop water-cooled (off the cooling tower condenser water side) DX package units that serve some penthouses. There are mezzanine and ocean side residential units that use the chilled water loop for their heat pumps systems.

Exhaust systems:

- A central bathroom exhaust system with rooftop fans is provided for all toilet rooms for the tower apartments. No fire dampers or sub-ducts were observed at connection points to the vertical shaft or at duct penetration through the apartment wall from the corridor.
- The central kitchen has a grease-laden roof fan exhausting air from the commercial range hood through an enclosed vertical duct.
- There are secondary kitchen hood exhausts that go through the common space that need to be fire rated.
- The exhaust system for the backstage of the theater is disabled by a dividing partition.
- Exhaust system from the laundry is destroyed. The flues from gas-fired dryers are in good condition.
- Exhaust systems from chiller/boiler room is broken.
- There was no exhaust system provided for the fully enclosed parking garage in the basement.

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Existing Mechanical Building Systems Description Continued

- The gas boilers exhaust for the saunas goes through non-rated A/C ductwork.
- The tower laundry room dryer exhaust ties into non-rated PVC piping.

Smoke control systems:

- One stairwell in the tower has an opening to the air vestibule. Another stairwell is enclosed with no pressurizing system provided.
- All fan coils are moving air in the rate of 2000 CFM or more and equipped with duct mounted smoke detectors.
- There is no smoke control system for any public spaces provided in the building.

Fire protection systems:

- Building is equipped with automated fire sprinkler system for partial coverage (not fully sprinkled) with residential units having one sprinkler head provided over the unit entrance door.
- Sprinkler system is connected to the six fire standpipes three for residential tower and three for the lower structure. At lower levels water pressure in the system exceeds 175 psi and there are no Pressure Reducing Valves provided.
- System fed with 750GPM rated fire pump test results failed.

Rational for HVAC Required Life Safety Modifications: Phase I

The following alterations and upgrades are required for the existing building systems where they affect life safety. The numbers coincide with values listed on pages 5-7.

1. The existing 14-ton fan-coil system, including the air handling unit (AHU), at the mezzanine that is serving both the mezzanine level and vertical tower hallways must be changed in order to provide a limited smoke control operation in a smoke/fire situation. Upon a signal from fire alarm system, the return air damper (to be installed) closes and the outside air (OA) damper (to be installed) fully opens for a 100% outside air pressurization during emergency operations. Each tower level supply outlet must be protected with the fire/smoke damper controlled by building fire alarm system and provided with access door. Sequence of operation shall be set for smoke arresting within the floor of incident and shall cut off the air supply to the floor where smoke is detected, while two floors above and one floor below become pressurized.

The existing HVAC system must be equipped with fire/smoke dampers at each floor at the vertical shaft connection.

- 2. Tower enclosed exit stairwells must be pressurized to prevent smoke from entering the stairwell from the fire floor. A pressurization system of fans connected to the emergency generator and controls will accomplish this.
- 3. Restore and bring up to code, the elevator shaft relief vents. Since no elevator lobby provided, pressurize tower elevator shafts. A pressurization system connected to the emergency generator and controls is to be installed.
- 4. Smoke Exhaust and Ventilation system must be provided for underground parking garage and connected to the emergency generator and controls. Presently there is no provision to eliminate carbon monoxide poisoning from vehicle exhaust fumes.
- 5. Provide a smoke control system for the commercial levels prior to their occupation.

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Rational for HVAC Required Life Safety Modifications Continued Phase I

- 6. Provide Cross ventilation as part of a smoke control system for the Lobby.
- 7. Replace the Air Handling Units and provide airtight fire-rated mechanical room located next to the chiller room.
- 8. All the condenser and chilled water pumps (5) must be moved in order to accomplish the required structural repairs. All pumps are past their useful life and need to be replaced. All connecting pipes and valves are rusted or broken and need to be replaced. For the pumps and horizontal piping (not risers), headers and valves to be replaced and relocated including house keeping pads and inertia bases.
- 9. Existing chiller room shall be provided with emergency ventilation and refrigerant leak monitoring system in order to comply with Chapter 11 of the Florida Mechanical Code. This system is missing and in-case of a system rupture, a high concentration of the refrigerant in the room could be dangerous and possibly fatal to maintenance personal.
- 10.Provide required controls and duct work for missing Outside Air intakes for the air-handling units throughout building.
- 11. Fire pump to be separated from electrical switchgear room with a fire rated wall. A possible fire in the switchgear room could damage the fire pump.
- 12. Hydraulic calculation shows that the fire pump is undersized developed head pressure is not enough for proper operation of the sprinkler system in the parking garage. According to public records, the Fire Department Authorities did not final or accept the installed sprinkler system. Test records recently submitted show that the fire pump and sprinkler system have failed the test and certification. The fire pump shall be replaced with one that is 1000 GPM rated and could provide 100 PSI of residual water pressure at the roof manifold, as per Florida Building Code Chapter 9.
- 13. Provide required fire sprinkler systems over new cooling tower per NFPA 214 and new heads required by new work and modified areas.

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Rational for HVAC Required Life Safety Modifications Continued Phase I

- 14. Repair and replace corroded and painted fire sprinkler heads and piping; provide 2 ½" fire hose connections with NST adapter, throughout the building. Such damaged sprinkler heads are not reliable.
- 15. Provide new fueling system for emergency generator from basement to new location above current flood criteria. Under the current conditions with the building evacuated, it is reasonable to provide this protection from future storm surges.
- 16.All piping, valves and fittings in swimming pool equipment room (at garage level) are totally corroded and must be replaced immediately there is high potential of corroded fitting rupture, which could cause a extensive damage to the pool and equipment area.
- 15. & 16.New electrical control wiring and devices will be required for the new DDC and DMS systems to be added.
- 17.Lobby areas will have open-air ventilation in the event of a fire by providing windows and glazed openings to be operational.
- 18.A smoke exhaust system will be provided for the lower commercial arcade areas.

There are numerous repair and replace maintenance issues that will exist after the above is completed for the HVAC and Fire Sprinkler systems. See Appendix A.

Electrical Phase I Schedule and Cost for Minimum Life Safety Requirements:

Note: There are additional repair and maintenance items that will still exist after the requirements stated below are completed for the electrical systems. Such items are listed in Appendix B- Electrical Maintenance Program

The rational for the items listed (1-7) is provided in pages to follow.

Description

Estimated Cost

1. Main Switchgear \$130,000 main power from vault which goes to main electric room

2. Power Distribution System

\$100,000

Contingency to repair/replace the existing wiring/conduit switches, devices and electrical panels that are not in good operating condition

2a. Switch Boards (1) 120/208, 3 phase, (1) 277/480 volt

Motor Control Center/Switchboard and (1) 480 volt Switchboard \$300,000

3. Lighting Upgrade
Some lighting upgrade is required particularly
in the egress and emergency lighting installations.

4. Emergency Power System

\$195,000

\$ 40,000

The existing emergency power system is inadequate for the existing and new mechanical system requirements, as noted. The existing generator will be replaced by a larger unit properly sized for the existing emergency loads.

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Electrical Phase I Continued

5. Fire Alarm System

\$210,000

The existing fire alarm system is not capable of expansion to include the necessary upgrades required for the life safety and mechanical system modifications. The new fire alarm system will be compliant with the present day NFPA-72 and NFPA-101 requirements.

6. Wiring Distribution to Residential Panels

From the mezzanine 480 volt Switchboard, power risers to each floor's transformer and distribution panel will provide 120/208 volts, single phase power to a new 60 amp or 30 amp panel to be located in each apartment.

\$477,500

6A. 60 amp panel in each apartment (if permitted by zoning)

\$172,500

7. Garage Exhaust System

\$ 25,000

Additional wiring and power will be required for The garage exhaust system

Total Hard Cost

\$1,650,000

Contractor O/H 25%

\$ 412,500

Permits/Fees

1%

\$ 20,000

Engineering fees 15% (design & inspection)

\$ 312,400

Total Electrical Cost

\$2,394,900

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Existing Electrical Systems

The building 480 volt and 120/208 volt, 3 phase power systems originate is the FP&L transformer vault located in the garage level. From the vault 120/208 volt power busways are installed to the main switchgear room, located at the lower lobby chiller room, where (3) main switchgear units are installed. In addition, a 277/480 volt power busway is installed from the vault to a switchboard/motor control center (MCC) also located at the lower lobby level. This switchboard/motor control center provides the 480 volt power required for the building's mechanical and plumbing systems.

Two 120/208 volt, 3 phase busways provide service to the switchboards located at the lower lobby and lobby levels for the building's 120/208 volt requirements. The other 120/208 volt busway provides service to the residential unit switchboard located on the mezzanine level. From this switchboard, 120/208 volt, 3 phase risers provide power to the panel board located in the residential floor corridors.

The apartment units receive 120/208 volt circuits from the corridor panels for general lighting circuits and for the fan coil air conditioning units. There is interconnecting wiring between apartments for the AC units, according to the original permitted plans. As noted in our inspections, full and partial kitchens have been wired from the original wiring for the lighting and AC units. There was numerous serious wiring building code violations observed and documented in our apartment inspections.

The emergency power system consists of the 277/480 volt emergency power generator, approximately (50 KW), located at the garage level, that services emergency power to the fire pump, elevator, water service, 112 ½ KVA transformer and the 120/208 volt, 400 ampere emergency power distribution panel the main switchgear room.

Existing Electrical Systems Continued

The fire alarm system consists of a Notifier fire alarm control panel located at the lobby level in the hotel management office. The residential and common area corridors have stobe/horn devices along with pull stations and smoke detectors located at the exits. This system is not the State-of-the-Art" system since smoke/fire detection is not complete in this building. In addition, the audible alarms now located in the residential corridors may not provide the required audible alarm signals in the residential units. Recent elevator inspection has determined that there is no elevator recall capability for the elevators, as required by Code.

Rational for Electrical System Required Life Safety Modifications: Phase I

The existing power distribution system cannot be reused due to the deteriorated, non-maintained condition of the main switchgear, busways and switchboards.

- The existing main switchgear located in the main electrical room consists of 1. (3) 120/208 volt, 3 phase switches. Two (2) of these switches are rated at 4,000 amps and one (1) rated at 2,500 amps. One of these switches has been disassembled. The other (2) main switches are deteriorated and are not reliable for safe and continued use. An additional new 277/480 volt main switch for the building service switchboard/motor control center is required to be located in the main switchgear room per Code requirement.
- 2. The busways in addition to being deteriorated are located below flood criteria and must be removed. Conduit and cable will replace the four (4) busways from the FP&L vault since the busways cannot be installed below flood criteria level. Busways from the main switchgear room to two (2) switchboards may be reused depending on their condition as determined by field tests.

The 120/208 volt tenant service switchboard located on the mezzanine level cannot be reused since the power distribution to the tenant floors will be 480 volt risers to the distribution panels on these floors. The switchboard located at the lobby level may be re-used depending on its condition.

New switchboards will be provided for the (2) switchboards now located in the chiller room on the lower lobby level since they are deteriorated beyond safe and continued use. The 120/208 volt switchboard located in the mezzanine level will be replaced with the new 480 volt switchboard for the apartment power distribution system.

It is intended to reuse existing power distributing wiring/conduit, switches and devices for the building's operation systems, common areas and the commercial units, if in good operating condition and Code Compliant. (Tower is separate)

The electrical contractor must verify that the condition of the wiring and conduit system is satisfactory. (Tower is separate)

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- 3.0 Some lighting upgrade is required, particularly in the egress and emergency lighting installations.
- 4.0 The existing emergency power system is inadequate for the existing and new mechanical system requirements, as noted. The existing generator will be replaced by a larger unit properly sized for the existing and new emergency loads.
- 5.0 The existing fire alarm system is not capable of expansion to include the necessary upgrades required for the life safety and mechanical system modifications. The new fire alarm system will be compliant with the present day NFPA-72 and NFPA-101 requirements.
- 6.0 The residential power distribution system will originate in the mezzanine electrical room where a new 480 volt switchboard will provide power to step-down transformers located at each floor's altered linen chute room.

From the transformer, a distribution panel will provide 120/208 volts, single-phase power to a new 60 or 30 amp panel to be located in each apartment.

- 7.0 Garage exhaust system. (See Mechanical Section)
- 8.0 Lobby Ventilation System (See mechanical Section)
- 9.0 Lower Arcade smoke removal system (See mechanical)

Notes:

- New code required wiring within the individual units will be the responsibility of the unit owner and is not included in this assessment or Phase I.
- The generator will be relocated from the garage level to the lower lobby level.
- The new automatic transfer switch, the emergency power transformer, main panel board and new panels for emergency lighting and other emergency circuits may be located in the existing main switchgear room or other appropriate area.

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Fire Assemblies Phase I

Schedule and Cost for Minimum Life Safety Requirements

On going inspections have revealed that many fire rated assemblies such as ceilings and walls between corridors, individual units, and equipment rooms have had their fire rating compromised due to the numerous openings and holes which have been created. These holes and openings allow the transmission of smoke and heat allowing a fire to spread more quickly. This condition is estimated to be prevalent in 90% of the units and common areas. In many cases it will be necessary to remove the ceilings to gain access to the openings between individual units.

Fire Rating for walls and ceiling Assemblies

Fire rated openings

\$ 425,000

Code required fire rating for walls and penetrations throughout the project have been compromised. Restore all required fire ratings of walls between units And between units and corridors.

Floor Penetrations

\$1,600,000

Structural Systems Phase I Schedule and Cost for Minimum Life Safety Requirements

One of the major areas of concern and a critical life safety issue is the condition of the structural systems in the building. There are many areas where the concrete slabs and columns are spalling and deteriorated. Several of the critical areas are in the chiller rooms and equipment areas on the commercial and lobby levels on the north side of the project as well as all of the locations in the parking garage. These areas must be repaired prior to reoccupying the building. Bid documents have been prepared and bids have been received to do the overall repairs. The items listed below represent the minimum structural repairs necessary to reoccupy the building. It is understood that additional structural repairs will be necessary once the building is occupied. Appendix C provides documentation pertaining to those costs.

Structural Repairs

Roof slab under chiller

Roof stab under einner			
Chiller rooms (floor & ceiling) and equipment areas			
Condenser Pump room, garage slab & columns			
Bid Items #2, 3	Partial and full depth slab repair \$1,200,00		,200,000
Bid Item #4	slab at expansion joint	\$	16,000
Bid Item #5	partial depth at top of slab	\$	30,000
Bid Item #6	Column repairs	\$	120,000
Bid Item #7	Shear wall repairs	\$	45,000
Bid Item #8	Interior basement walls	\$	100,000
Bid Item #11	Seawall/basement wall	\$	20,000
Bid Item #13	Crack repairs epoxy	\$	100,000
Bid Item #17	Garage fire stop repairs	\$	8,000
Bid Item# 26	Lowrise exterior wall repair	\$	30,000
Bid Item #27	Spandrel Beam repair	\$	20,000
Bid Item # 30	Air Handler supports	\$	15,000
Bid Item # 1	Mobilization	\$	175,000
Bid Item # 29	Curtain wall temporary shoring	\$	50,000
Subtotal		\$1	,929,000
Engineering insp	ection 8%	\$	154,320
Permits 1%		\$	20,000

Total \$2,103,320

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Guard Railings Phase I

Schedule and Cost for Minimum Life Safety Requirements

Original railings have been replaced with acrylic plastic sheets and do not provide the necessary strength to prevent persons from falling through them. Currently all units with such railings have been locked off.

Replace Balcony Railings (tower) 300 lf of railing Bid Item #34

\$ 30,000

Schedule and Cost for Minimum Life Safety Requirements

	Total	Phase I	Phase II
1. HVAC	\$4,795,100	\$ 2,445,100	\$ 2,350,000
2. Electrical	\$4,644,900	\$ 2,394,900	\$ 2,250,000
3. Fire Assemblies	\$2,025,000	\$ 2,025,000	000
4. Structural	\$5,065,000	\$ 2,103,300	\$2,961,700
5. Guard Railings	\$ 30,000	\$ 30,000	000
6. Windows	\$3,100,000	000	\$ 3,100,000
7. Curtain Wall	\$ 400,000	000	\$ 400,000
8. Elevator	\$ 750,000	000	\$ 750,000
9 Plumbing	\$2,500,000	000	\$ 2,500,000
10 Roof	\$1,436,000	000	\$ 1,436,000
6. Demolition 10%	\$2,400,000	\$ 900,000	\$1,500,000
Total Cost	\$27,146,000	\$ 9,898,300	\$17,247,700

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Summary

As emphasized above, Phase I repair costs are necessary to allow only the common elements of the building to be reoccupied excluding the lower commercial areas and specialized areas such as the theater and banquet facilities.

To reoccupy private units owners will have to insure that their individual units are fully functional by providing documentation to the city that all electrical, plumbing, mechanical, and interior work is code compliant. The size of some of the units may be questioned since the City has noted that any unit less than 400 square feet in area will not support a full sized kitchen.

The building, being operated as a hotel, is required to be fully sprinkled. Some unit modifications may have restricted the effectiveness of the single sprinkler heads previously permitted for individual hotel rooms. Therefore before any occupation additional sprinkler heads must be provided by the association in individual units prior to the Phase I reoccupation of the building in common areas

End of Report

By: John C. Pistorino, P.E

Principal

James F. Smith, P.E. **Electrical Engineer**

Gene Stavitsky, P.E.

Mechanical Engineer

Stanley Stanczyk, R.A., CGC Architect

Appendix A

HVAC Maintenance Program Phase II

1) All air handling units and fan coil units must be changed out, Ductwork, insulation

\$ 2,000,000

2) Provide smoke evacuation system in addition to existing 100% fresh air AC system for all commercial areas before occupation of such areas.

\$250,000

3) Provide mechanical smoke control system (incl. smoke evac. system) for theater and banquet halls before occupation of such areas.

\$100,000

4) Refer to P&A Report Dated, June 2004

December 2004

January 2005

March 2005

Subtotal

\$ 2,350,000

Elevators Repair

\$ 750,000

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Appendix B

Electrical Maintenance Program Phase II

Description		Cost
1. FPL Vault Flood Proofing		\$ 250,000
2. Retrofitting Individual Units 575	x \$2,000	\$1,150,000
3. Code Violations Refer to P&A R June 2004 December January March	2004	\$300,000
4. Commercial Units		not estimated
a. Elevatorsb. Power Upgradec. Controllers		\$150,000 \$400,000

<u>Subtotal</u> \$2,250,000

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Appendix C

Structural Maintenance Program Phase II

1. Structural Repairs

Bid Items # 1-37 Average Bid

\$5,065,000

Less items complete Phase I

(\$ 2,103,300)

Total remaining structural repairs

\$ 2,961,700

Cost does not include tile removal and replacement or waterproof of exposed structural decks

Window Replacement

Structural repairs to concrete block walls (Bid Item # 18) on the tower will necessitate the replacement of the windows.

Most of the windows have exceeded their useful life due to Maintenance. Leakage is occurring, many operators do not Function, and water intrusion occurs on a frequent basis

Window replacement

\$3,100,000

2. Curtain Wall

The supporting structure and aluminum curtain wall frame are corroded away and require replacement. (Included in Bid Item # 29)

Curtain wall replacement

\$ 400,000

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Appendix D Plumbing Phase II

Plumbing replacement

Sanitary drain piping Water distribution piping \$2,500,000

Refer to P&A Report dated, June 2004

December 2004

January 2005

March 2005

Commercial Units not estimated

Appendix E

Roofing Phase II

Roof has reached the end of its useful life See report P&A Report dated, June 2004

718 Squares x \$2,000/sq

\$ 1,436,000

Appendix F

Florida Building Code 2004 Code Compliance Identification Phase I

- 1) Minimum Life Safety Requirements for Mechanical Systems are based on Florida Fire Prevention Code 2004 and Florida Building Code 2004 (Existing Building).
- 2) All proposed repairs and modification for existing mechanical systems are in compliance with Florida Building Code 2004(Existing buildings) Chapter 6 and classified as an Alterations Level 2.
- 3) Upon completion of proposed alterations, the fire protection system, which consists of the Automatic Fire Sprinklers System (full coverage) and Class I Fire Standpipe System, will comply with Fire Prevention Code 69A-43.011 and Florida Building Code Chapter 9.
- 4) Upon completion of proposed alterations, the HVAC system including smoke control system for Residential Tower and Lobby area will comply with Florida Building Code Chapter 9.
- 5) The re-occupancy of the Theater, Banquet halls and Commercial area shall follow the completion of HVAC Maintenance Program that includes installation of the smoke control system, as per Florida Building Code 2004 Chapter.

Appendix G Fire Prevention Code Phase I

In compliance with the Florida Fire Prevention Code effective January 1, 2005, the mandated codes shall be the following:

- 1. For electrical installation of Condominium, Hotel and Retail/Commercial occupancy, the following codes shall be used:
 - NFPA 70 National Electrical Code (NEC) 2005 edition
 - NFPA 72 National Fire Alarm Code 2002 edition
 - NFPA 101 Life Safety Code 2003 Edition
 - NFPA 110 Standard for Emergency and Standby Power Systems 2002 edition
- 2. For transient hotel occupancy, Florida Administrative Code Chapter 69A-43 shall be used in conjunction with the applicable NFPA sections noted above and the following:
 - 69A-43.009 Automotive Smoke Detection
 - 69A-43.0095 Individually Annunciated at Panel

Appendix H Drawings











